

## § 431.430

such judicial review as may be appropriate and available.

(d) A petitioner has not exhausted other administrative remedies until a request for reconsideration has been filed and acted upon or deemed denied.

### § 431.430 Finality of decision.

(a) A decision to prescribe a rule that a State energy conservation standard or other requirement not be preempted is final on the date the rule is issued, *i.e.*, signed by the Secretary. A decision to prescribe such a rule has no effect on other regulations of covered equipment of any other State.

(b) A decision to prescribe a rule withdrawing a rule exempting a State standard or other requirement is final on the date the rule is issued, *i.e.*, signed by the Secretary. A decision to deny such a petition is final on the day a denial of a request for reconsideration is issued, *i.e.*, signed by the Secretary.

## Subpart X—Small Electric Motors

SOURCE: 74 FR 32072, July 7, 2009, unless otherwise noted.

### § 431.441 Purpose and scope.

This subpart contains definitions, test procedures, and energy conservation requirements for small electric motors, pursuant to Part A-1 of Title III of the Energy Policy and Conservation Act, as amended, 42 U.S.C. 6311-6317. This subpart does not cover “electric motors,” which are addressed in subpart B of this part.

[77 FR 26638, May 4, 2012]

### § 431.442 Definitions.

The following definitions are applicable to this subpart:

*Alternative efficiency determination method*, or AEDM, means, with respect to a small electric motor, a method of calculating the total power loss and average full-load efficiency.

*Average full-load efficiency* means the arithmetic mean of the full-load efficiencies of a population of small electric motors of duplicate design, where the full-load efficiency of each motor in the population is the ratio (expressed as a percentage) of the motor’s

## 10 CFR Ch. II (1–14 Edition)

useful power output to its total power input when the motor is operated at its full rated load, rated voltage, and rated frequency.

*Basic model* means, with respect to a small electric motor, all units of a given type of small electric motor (or class thereof) manufactured by a single manufacturer, and which have the same rating, have electrical characteristics that are essentially identical, and do not have any differing physical or functional characteristics that affect energy consumption or efficiency. For the purpose of this definition, “rating” means a combination of the small electric motor’s group (*i.e.*, capacitor-start, capacitor-run; capacitor-start, induction-run; or polyphase), horsepower rating (or standard kilowatt equivalent), and number of poles with respect to which § 431.446 prescribes nominal full load efficiency standards.

*CSA* means Canadian Standards Association.

*DOE or the Department* means the U.S. Department of Energy.

*EPCA* means the Energy Policy and Conservation Act, as amended, 42 U.S.C. 6291-6317.

*IEC* means International Electrotechnical Commission.

*IEEE* means Institute of Electrical and Electronics Engineers, Inc.

*NEMA* means National Electrical Manufacturers Association.

*Small electric motor* means a NEMA general purpose alternating current single-speed induction motor, built in a two-digit frame number series in accordance with NEMA Standards Publication MG1-1987, including IEC metric equivalent motors.

[74 FR 32072, July 7, 2009, as amended at 77 FR 26638, May 4, 2012]

### TEST PROCEDURES

### § 431.443 Materials incorporated by reference.

(a) *General*. The Department incorporates by reference the following standards into subpart X of part 431. The Director of the Federal Register has approved the material listed in paragraph (b) of this section for incorporation by reference in accordance with 5 U.S.C. 552(a) and 1 CFR part 51.

## Department of Energy

## § 431.445

Any subsequent amendment to a standard by the standard-setting organization will not affect the DOE test procedures unless and until the DOE amends its test procedures. DOE incorporates the material as it exists on the date of the approval and a notice of any change in the material will be published in the FEDERAL REGISTER. All approved material is available for inspection at the National Archives and Records Administration (NARA). For information on the availability of this material at NARA, call 202-741-6030, or go to: [http://www.archives.gov/federal\\_register/code\\_of\\_federal\\_regulations/ibr\\_locations.html](http://www.archives.gov/federal_register/code_of_federal_regulations/ibr_locations.html). Also, this material is available for inspection at U.S. Department of Energy, Office of Energy Efficiency and Renewable Energy, Building Technologies Program, Sixth Floor, 950 L'Enfant Plaza, SW., Washington, DC 20024, (202) 586-2945, or go to [http://www1.eere.energy.gov/buildings/appliance\\_standards/](http://www1.eere.energy.gov/buildings/appliance_standards/). Standards can be obtained from the sources below.

(b) *CAN/CSA*. Canadian Standards Association, Sales Department, 5060 Spectrum Way, Suite 100, Mississauga, Ontario, L4W 5N6, Canada, 1-800-463-6727, or go to <http://www.shopcsa.ca/onlinestore/welcome.asp>.

(1) *CSA C747-09* ("CSA C747"), Energy efficiency test methods for small motors, October 2009, IBR approved for §§ 431.444; 431.447.

(2) *CSA C390-10*, Test methods, marking requirements, and energy efficiency levels for three-phase induction motors, March 2010, IBR approved for §§ 431.444; 431.447.

(c) *IEEE*. Institute of Electrical and Electronics Engineers, Inc., 445 Hoes Lane, P.O. Box 1331, Piscataway, NJ 08855-1331, 1-800-678-IEEE (4333), or go to <http://www.ieee.org/web/publications/home/index.html>.

(1) *IEEE Std 112-2004*, Test Procedure for Polyphase Induction Motors and Generators, approved February 9, 2004, IBR approved as follows:

(i) Section 6.3, Efficiency Test Method A, Input-Output, IBR approved for §§ 431.444; 431.447;

(ii) Section 6.4, Efficiency Test Method B, Input-Output with Loss Segregation, IBR approved for §§ 431.444; 431.447.

(2) *IEEE Std 114-2010*, Test Procedure for Single-Phase Induction Motors, approved September 30, 2010, IBR approved for §§ 431.444; 431.447.

[74 FR 32072, July 7, 2009, as amended at 77 FR 26638, May 4, 2012]

### § 431.444 Test procedures for the measurement of energy efficiency.

(a) *Scope*. Pursuant to section 346(b)(1) of EPCA, this section provides the test procedures for measuring, pursuant to EPCA, the efficiency of small electric motors pursuant to EPCA. (42 U.S.C. 6317(b)(1)) For purposes of this part 431 and EPCA, the test procedures for measuring the efficiency of small electric motors shall be the test procedures specified in § 431.444(b).

(b) *Testing and Calculations*. Determine the energy efficiency and losses by using one of the following test methods:

(1) Single-phase small electric motors: Either *IEEE Std 114-2010* or *CSA C747* (incorporated by reference, see § 431.443);

(2) Polyphase small electric motors less than or equal to 1 horsepower (0.75 kW): Either *IEEE Std 112-2004* Test Method A or *CSA C747* (incorporated by reference, see § 431.443); or

(3) Polyphase small electric motors greater than 1 horsepower (0.75 kW): Either *IEEE Std 112-2004* Test Method B or *CSA C390-10* (incorporated by reference, see § 431.443).

[74 FR 32072, July 7, 2009, as amended at 77 FR 26638, May 4, 2012]

### § 431.445 Determination of small electric motor efficiency.

(a) *Scope*. When a party determines the energy efficiency of a small electric motor to comply with an obligation imposed on it by or pursuant to Part A-1 of Title III of EPCA, 42 U.S.C. 6311-6317, this section applies.

(b) *Provisions applicable to all small electric motors*—(1) *General requirements*. The average full-load efficiency of each basic model of small electric motor must be determined either by testing in accordance with § 431.444 of this subpart, or by application of an alternative efficiency determination method (AEDM) that meets the requirements of paragraphs (a)(2) and (3) of this section, provided, however, that an